

Before the  
**Federal Communications Commission**

Washington, D.C. 20554

In the Matter of: )  
 )  
Reallocation and Service Rules for the 698- ) GN Docket No. 01-74  
746 MHz Spectrum Band (Television )  
Channels 52-59) )

To: The Commission

**COMMENTS OF QWEST WIRELESS, LLC**

Qwest Wireless LLC ("Qwest Wireless")<sup>1</sup> hereby submits comments in response to the Commission's *Notice of Proposed Rulemaking* in the above-captioned proceeding.<sup>2</sup>

The Commission faces numerous obstacles in its effort to reallocate additional spectrum for mobile wireless services, and the primary status currently afforded to incumbent broadcasters in the 698-746 MHz ("Lower 700 MHz") band through at least 2006 is a significant obstacle.<sup>3</sup> Nonetheless, Qwest Wireless supports the Commission's proposal to reallocate the Lower 700 MHz band to fixed and mobile services. As with the 746-806 MHz ("Upper 700 MHz") band, continued broadcast use of the Lower 700 MHz band may preclude new licensees from utilizing

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<sup>1</sup> Qwest Wireless, LLC, together with TW Wireless, LLC, a joint venture in which Qwest Wireless holds a majority equity and sole controlling ownership interest, provides broadband PCS services in a number of markets.

<sup>2</sup> *Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59)*, *Notice of Proposed Rulemaking*, GN Docket No. 01-74, FCC 01-91 (rel. March 28, 2001) ("NPRM").

<sup>3</sup> The Commission faces similar challenges relating to relocating incumbent users in its proceeding contemplating reallocation of spectrum in the 1710-1850 MHz and 2500-2690 MHz bands for advanced wireless systems. *See Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems*, *Notice of Proposed Rulemaking and Order*, ET Docket No. 00-258, FCC 00-455 (rel. Jan. 5, 2001) ("3G NPRM"); U.S. Department of Commerce, National Telecommunications and Information Administration, Final Report, *The Potential for Accommodating Third Generation Mobile Systems in the 1710-1850 MHz Band*, (Mar. 30, 2001); Federal Communications Commission, Final Report, *Spectrum Study of the 2500-2690 MHz Band* (Mar. 30, 2001).

this spectrum in the near future.<sup>4</sup> The Commission should remain open to various band-clearing approaches and ensure that its regulations do not favor one technology over others. As it has advocated with respect to licensing policy for the Upper 700 MHz band and for third generation wireless spectrum, Qwest Wireless urges the Commission to reallocate and license this spectrum in a manner that affords licensees maximum flexibility in the services they provide.

**I. REALLOCATION OF THE 698-746 MHz BAND SHOULD PROMOTE NEW MOBILE AND FIXED WIRELESS SERVICES BY FACILITATING NEW LICENSEES' FLEXIBLE USE OF THE SPECTRUM**

Qwest Wireless generally supports the Commission's proposal to allocate the entire Lower 700 MHz band to fixed and mobile services, retaining the existing broadcast allocation in accordance with statutory requirements governing broadcasters' transition to digital television ("DTV").<sup>5</sup> The band is located well below 3 GHz and thus ideal for mobile wireless services.<sup>6</sup> Moreover, its location near spectrum currently licensed to cellular and ESMR services can create efficiencies for manufacturers and carriers in designing products and networks, to the ultimate benefit of consumers.<sup>7</sup> Qwest Wireless agrees that the other potential services named in the *NPRM* -- wireless local loop, video and multimedia applications, and industrial communications services -- are feasible for this spectrum, although there is no need to make special accommodations for such services in either the reallocation or service rules.<sup>8</sup> Leaving such

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<sup>4</sup> See *NPRM* ¶¶ 2, 6-7 (citing 47 U.S.C. § 309(j)(14) and decisions in MM Docket No. 87-268).

<sup>5</sup> *NPRM* ¶ 14.

<sup>6</sup> See *3G NPRM*, ¶ 38 n.74; *2000 Biennial Regulatory Review - Spectrum Aggregation Limits for Commercial Mobile Radio Services, Notice of Proposed Rulemaking*, WT Docket No. 01-14, FCC 01-28, ¶ 26 (rel. Jan. 23, 2001).

<sup>7</sup> See *Amendment of the Commission's Rules to Establish New Personal Communications Services, Memorandum Opinion and Order*, 9 FCC Rcd. 4957, ¶ 35 (1994).

<sup>8</sup> *NPRM* ¶ 14.

marketplace decisions to the marketplace itself is the better approach and is consistent with the Commission's statutory obligations under Section 303(y) of the Act.<sup>9</sup>

#### **A. Considerations for Adjacent Channel and LPTV Broadcast Licensees**

The Commission seeks comment on whether restrictions to the allocation are necessary to protect adjacent channel broadcast television operations at Channel 51, particularly restrictions to minimize the presence of systems (such as low power mobile operations).<sup>10</sup> Generally, such issues should be left to the service-specific technical rules, which will limit harmful interference between licensees. Bidders at auction will factor considerations such as technical rules into their bidding strategies and business plans, and design their services and facilities accordingly. A new licensee may determine on its own that a "guard band" of some sort is necessary and, indeed, mobile wireless licensees *on their own* often establish guard band channels at the edges of their licensed spectrum to avoid adjacent channel interference. New licensees should have the flexibility, consistent with sound RF engineering principles and the capabilities of their own networks, to avoid harmful interference with adjacent channel broadcasters. Given the dynamic nature of wireless technologies, the Commission should take care not to prejudge new licensees' technical capabilities.

Qwest Wireless also supports the Commission's proposal to retain secondary status for LPTV and TV Translator stations in the band.<sup>11</sup> While these stations should be permitted to operate until such time as the new licensee determines that potential interference will result, the Commission must ensure that secondary status licensees cease operations in a timely manner as determined by the new licensee.

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<sup>9</sup> 47 U.S.C. § 303(y).

<sup>10</sup> *NPRM* ¶ 16.

<sup>11</sup> *NPRM* ¶ 18.

**B. The Commission Should Minimize Additional Incumbency in the Spectrum, Consistent with Existing Licensees' and Applicants' Statutory Rights**

The Commission has approved a variety of mechanisms involving voluntary agreements among parties to clear incumbent broadcasters from the Upper 700 MHz band before the December 31, 2006 DTV transition end date.<sup>12</sup> To the extent possible, the Commission should encourage such measures for Lower 700 MHz band as well. While Qwest Wireless does not object to measures to enable LPTV stations to obtain alternative channels,<sup>13</sup> it is clear from the Balanced Budget Act of 1997 that such stations may *not*, under any circumstances, remain in the band after December 31, 2006.

**II. FLEXIBLE SERVICE RULES WILL PROMOTE CONTINUED COMPETITION IN THE MOBILE WIRELESS MARKETPLACE**

**A. Licensing Mobile and Fixed Services in the Lower 700 MHz Band, Subject to Flexible Technical Rules, is a Valid Exercise of the Commission's Flexible Use Authority**

The Commission should reallocate this spectrum in the 698-746 MHz band to permit fixed and mobile services, consistent with technical rules (discussed *infra*) that prevent harmful interference between licensees.<sup>14</sup> Qwest Wireless believes that the marketplace will encourage licensees to offer primarily new and emerging mobile wireless services, providing new solutions to consumers and alternatives to conventional fixed services. The Commission concluded that providing maximum flexibility to new licensees would facilitate the growth of such services in the Upper 700 MHz band,<sup>15</sup> and it should not deviate from this approach here.

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<sup>12</sup> See *Service Rules for the 746-764 and 776-794 MHz Bands, Third Report and Order*, WT Docket No. 99-168, FCC 01-25 (rel. Jan. 23, 2001).

<sup>13</sup> See *NPRM* ¶ 28.

<sup>14</sup> See *NPRM* ¶¶ 40-41.

<sup>15</sup> See *Service Rules for the 746-764 and 776-794 MHz Bands, First Report and Order*, WT Docket No. 99-168, 15 FCC Rcd. 476, ¶¶ 20-25 (2000).

Importantly, and as the Commission acknowledges, for the Upper 700 MHz band the Commission allowed broadcast-type services that otherwise "satisfied our technical and service rules."<sup>16</sup> Qwest Wireless submits that, however the Commission allocates the Lower 700 MHz band, the Commission should not *license* any new broadcast-type services there given the ongoing presence of incumbents. Mobile and fixed wireless services continue to strive to *reduce* their operating power requirements. There are viable alternative options for broadcast operations, such as DBS and cable, and authorizing such services on this spectrum risks burdening new mobile and fixed wireless services. Should the Commission instead determine that "flexibility" requires allowing services other than fixed and mobile, any new "broadcast-type" services provided over the spectrum must be subject to the *same* technical and service rules -- and limitations -- thus precluding high-power broadcast operations in the spectrum. Similarly, no new satellite-based services should be licensed on the lower 700 MHz band.<sup>17</sup> Due to the difficulties in coordinating such services with terrestrial mobile licensees, such licensing would likely impose significant restrictions and delays on new and emerging services.

**B. Lower 700 MHz Band Spectrum Should Be Licensed in a Combination of 12 MHz and 6 MHz Blocks**

The Commission should not license the spectrum in a single 48 MHz block.<sup>18</sup> Two or more smaller combinations of blocks are necessary both to promote competitive service provision and diversity in spectrum licensing, consistent with the Commission's Section 309(j) mandates.<sup>19</sup> Smaller block sizes are necessary to allow small- and mid-sized carriers to participate successfully in an auction for such services, instead of being relegated to obtaining spectrum in the secondary

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<sup>16</sup> See *NPRM* ¶ 44.

<sup>17</sup> *NPRM* ¶ 45.

<sup>18</sup> *NPRM* ¶ 46.

<sup>19</sup> See *NPRM* ¶ 3 (citing 47 U.S.C. § 309(j)(3)).

market (either via partitioning/disaggregation or, if authorized, spectrum leasing). If the market places the highest value on a single licensee holding all 48 MHz, a bidder will be able to aggregate multiple blocks at auction without precluding other potential bidders from participating.

A minimum of 6 MHz of Lower 700 MHz band spectrum is necessary to provide viable mobile wireless services. Qwest Wireless believes that aggregated blocks of this spectrum, particularly when provided in conjunction with existing CMRS spectrum such as cellular, broadband PCS and ESMR, can be used for a variety of advanced mobile wireless applications. Qwest Wireless thus would support licensing the spectrum in a combination of, *e.g.*, 3x12 MHz and 2x6 MHz blocks. Where a bidder needs more spectrum in a particular market, it can aggregate multiple blocks – an option that is facilitated by the Commission's auction rules.<sup>20</sup> In no event should the Commission license a single 48 MHz block of spectrum to a single entity. Given the scarcity of mobile wireless spectrum elsewhere, an incumbent carrier winning such a block may have an instant competitive advantage over its competitors. This is inconsistent with the approach taken for the Upper 700 MHz band and should likewise be rejected here.

In most major markets, a broadcast incumbent occupies virtually every channel. This should not, however, be the Commission's primary concern in determining spectrum block sizes. The Commission should focus its efforts on facilitating the relocation of broadcast incumbents *en masse*, rather than enabling new licensees to utilize just slivers of spectrum. Finally, the Commission should not pair spectrum block unnecessary; rather, it should employ the same flexible approach adopted for the Upper 700 MHz band in order to level the playing field for multiple technologies, including TDD.<sup>21</sup>

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<sup>20</sup> NPRM ¶¶ 46-52.

<sup>21</sup> NPRM ¶¶ 60-64.

**C. Spectrum Should Be Assigned Via a Combination of EAG Licenses and One Nationwide License**

As with spectrum block sizes, Qwest Wireless opposes a “one-size-fits-all” approach. To advance the objective of Section 309(j), the Commission should license one 12 MHz spectrum block on a nationwide basis, with the remainder (2x12 MHz and 2x6 MHz blocks) licensed on an EAG basis. Bidders with different business plans and different spectrum needs would thus be able to compete effectively in the auction, providing opportunities for nationwide carriers to augment their spectrum as well as providing additional spectrum opportunities for regional and rural carriers. Qwest Wireless believes that this hybrid approach strikes an appropriate balance between competing interests. While smaller license areas (*e.g.*, MSA/RSAs) may provide additional spectrum ownership opportunities, Qwest Wireless believes that licensing on a small area basis would necessitate significant aftermarket transactions, likely hindering the rapid deployment of new services.<sup>22</sup> Thus, if a nationwide license is not adopted, all spectrum blocks should be licensed in EAGs.

**D. Technical Rules Should Prevent Harmful Interference Between New Licensees but Otherwise Accommodate Flexible Service Deployment**

Qwest Wireless supports applying the general provisions of the Part 27 technical rules to the Lower 700 MHz band, including the rules for co-channel interference, and out-of-band and spurious emission limits.<sup>23</sup> Qwest Wireless also supports applying the existing Part 27 power limits to this service, as these requirements were expressly intended to accommodate multiple transmission technologies, including both FDD and TDD.<sup>24</sup> It is unnecessary, however, to make special accommodation for “video broadcasting” except to the extent necessary to accommodate

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<sup>22</sup> *Amendment of the Commission's Rules to Establish New Personal Communications Services, Second Report and Order*, 8 FCC Rcd. 7700, ¶¶ 73-74 (1993) (“*PCS Second Report and Order*”).

<sup>23</sup> *NPRM* ¶ 65.

existing licensees or applicants with statutory rights to use the spectrum through 2006.<sup>25</sup> Finally, the existing RF emission limits applicable to Upper 700 MHz spectrum should also apply here.<sup>26</sup>

In particular, Qwest Wireless supports use of a field strength limit to control co-channel interference in this band rather than coordination.<sup>27</sup> Ongoing coordination activities are labor-intensive and often do not support the timely and efficient deployment of new facilities. Where the parties desire, they can agree to alternative field strengths at their common border, consistent with the Commission's approach to broadband PCS service and, in the rare instances when harmful interference results, the parties can work out disputes between themselves.<sup>28</sup> Qwest Wireless' experience in broadband PCS deployment underscores the feasibility and desirability of both using a field strength approach rather than coordination, as well as allowing co-channel licensees to reach alternative arrangements.

**E. Licensing Rules Should Facilitate New Licensees' Flexibility in the Use of Spectrum *and* in the Secondary Market or Aftermarket**

***Regulatory Status.*** As with the Part 27 technical rules, the existing Part 27 licensing rules should generally apply to the Lower 700 MHz band. In this regard, it is unnecessary for the Commission to depart from the existing Part 27 rules and require licensees to "describe their proposed services."<sup>29</sup> Such a requirement is impractical given the dynamic nature of the services provided, and may not readily fit within a predefined description. Other than the "regulatory status" designation provided on the FCC Form 601,<sup>30</sup> the Commission's enforcement focus should instead be on a licensee's compliance with generally applicable technical and operating rules.

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<sup>24</sup> NPRM ¶ 62.

<sup>25</sup> NPRM ¶ 78.

<sup>26</sup> NPRM ¶ 79.

<sup>27</sup> NPRM ¶¶ 66-71.

<sup>28</sup> NPRM ¶ 73; see 47 C.F.R. § 24.236; *PCS Second Report and Order*, ¶ 177.

<sup>29</sup> NPRM ¶ 85.

<sup>30</sup> See NPRM ¶ 84.



Similarly, carriers should have maximum flexibility to shift from service to service, even if doing so results in a change to regulatory status. To the extent that any notification is required, it should be required *after* the change is made and *not* be subject to prior Commission approval. Licensees are on notice that different regulatory status may impose different regulatory obligations, and that they will become subject to the new obligations upon such a change. Requirements beyond a simple notification are unnecessary.

***Leasing/Disaggregation/Partitioning.*** Qwest Wireless strongly supports allowing leasing of the spectrum, subject to the outcome of the *Secondary Markets NPRM*.<sup>31</sup> Leasing encourages efficient spectrum use and helps to minimize spectrum warehousing. Depending on the outcome of the Commission's other below-3 GHz spectrum reallocation efforts, for many medium-sized and smaller carriers spectrum leasing may prove to be the most feasible means of acquiring access to additional spectrum and enhancing market competitiveness. Given the dearth of spectrum available for mobile wireless use, to preserve the competitiveness of the wireless marketplace the Commission should do everything possible to accommodate post-auction opportunities for acquiring spectrum rights. Also, if the Commission deems it necessary, consistent with the public interest, to license the spectrum in blocks of 24 MHz or larger, it is particularly important that the Commission provide such aftermarket opportunities. For similar reasons, the Commission should allow licensees to liberally disaggregate and partition their licenses.<sup>32</sup> Qwest Wireless has partitioned and disaggregated its broadband PCS licensees to many smaller entities, providing spectrum opportunities for smaller and rural entities otherwise unable to participate directly in an auction.

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<sup>31</sup> See *NPRM* ¶ 87 (citing *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets*, Notice of Proposed Rulemaking, WT Docket No. 00-230, FCC 00-402 (rel. Nov. 27, 2000)).

<sup>32</sup> *NPRM* ¶ 106.

***License Term/Renewal Expectancy/Performance Requirements.*** Qwest Wireless supports a uniform 10-year license term beginning January 1, 2007, subject to the same renewal expectancy provided under Section 27.14(b) of the rules.<sup>33</sup> In no event should the license term end *prior to* the Commission's proposed January 1, 2015 date. Qwest Wireless also supports a performance requirement of substantial service at the end of the license term.<sup>34</sup> Should the Commission opt for the earlier deadline, it is particularly important that it impose a single performance requirement deadline at the *end* of the license term, given the uncertainties of relocating incumbent broadcast licensees.

## CONCLUSION

For the foregoing reasons, the Commission's reallocation and service rules for new mobile wireless spectrum, including the Lower 700 MHz band should provide new licensees with maximum flexibility in service deployment.

Respectfully submitted,

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<sup>33</sup> *NPRM* ¶¶ 99-100.

<sup>34</sup> *NPRM* ¶ 104.